

FCC Appendix RF Test Data for BLE

FCC ID : 2BVOW-BJ03

Company : Shenzhen Maidehou Intelligent Manufacturing Co., Ltd.

EUT : urine alarm

Model Number : BJ03

Report No. : CTA26040301201

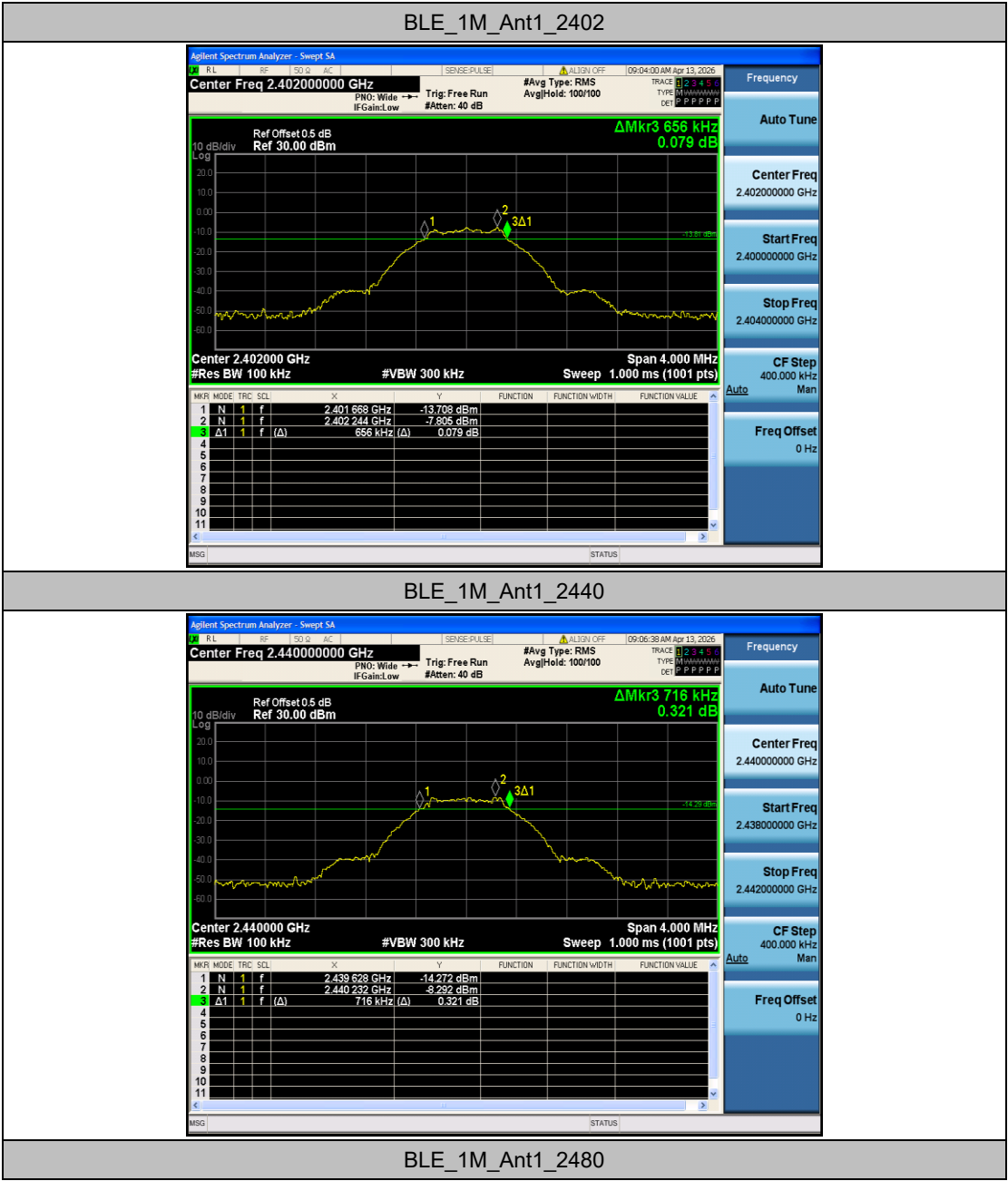
Reviewed By : Eric Wang

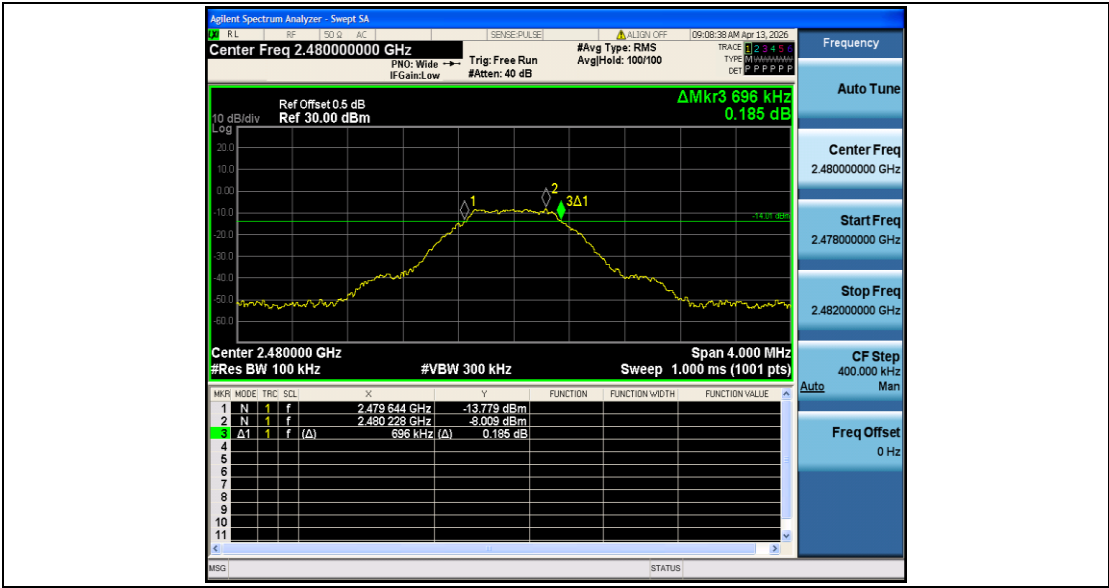
Appendix A: DTS Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	DTS BW [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	0.656	2401.668	2402.324	0.5	PASS
		2440	0.716	2439.628	2440.344	0.5	PASS
		2480	0.696	2479.644	2480.340	0.5	PASS

Test Graphs





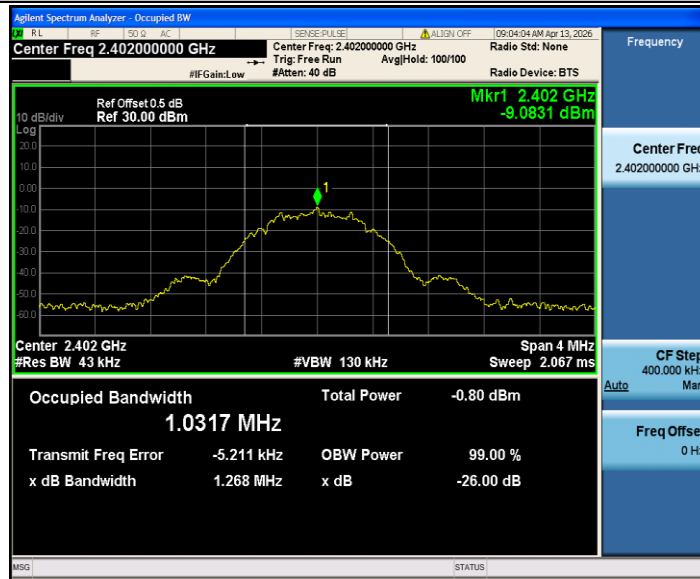
Appendix B: Occupied Channel Bandwidth

Test Result

TestMode	Antenna	Freq(MHz)	OCB [MHz]	FL[MHz]	FH[MHz]	Limit[MHz]	Verdict
BLE_1M	Ant1	2402	1.0317	2401.4789	2402.5106	---	---
		2440	1.0363	2439.4754	2440.5117	---	---
		2480	1.0398	2479.4780	2480.5178	---	---

Test Graphs

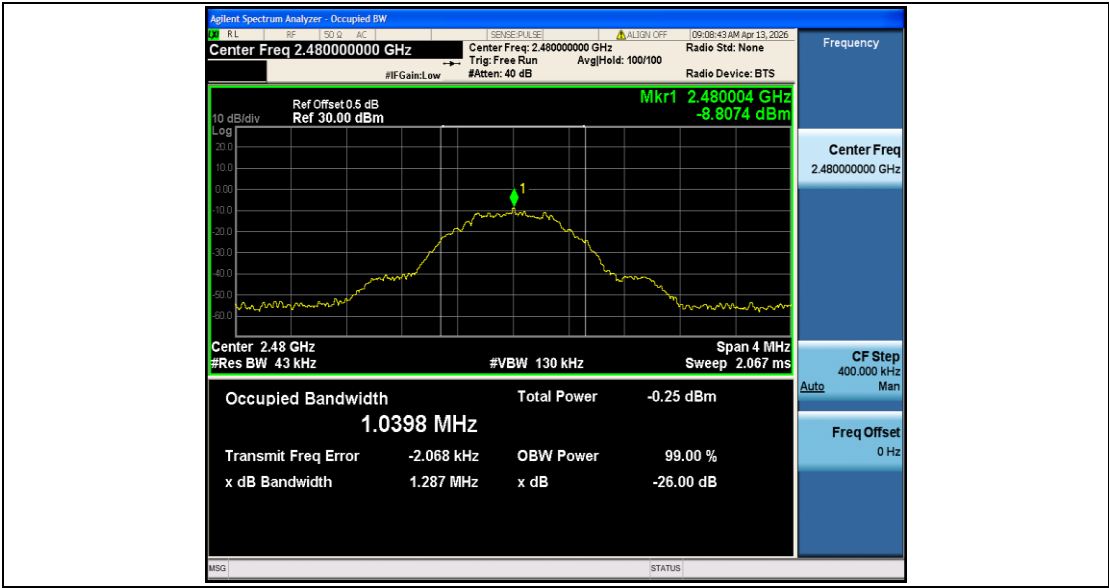
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



Appendix C: Maximum conducted output power

Test Result Peak

TestMode	Antenna	Freq(MHz)	Conducted Peak Power[dBm]	Conducted Limit[dBm]	Verdict
BLE_1M	Ant1	2402	-7.42	≤30	PASS
		2440	-7.21	≤30	PASS
		2480	-6.98	≤30	PASS

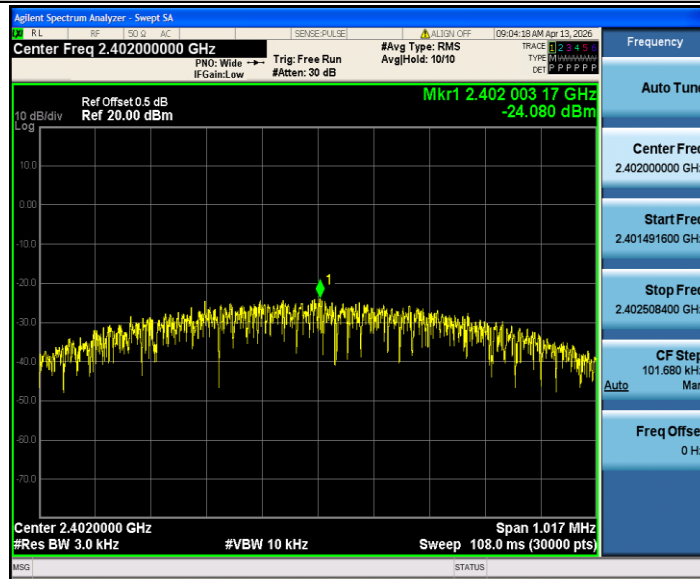
Appendix D: Maximum power spectral density

Test Result

TestMode	Antenna	Freq(MHz)	Result[dBm/3kHz]	Limit[dBm/3kHz]	Verdict
BLE_1M	Ant1	2402	-24.08	≤8.00	PASS
		2440	-23.50	≤8.00	PASS
		2480	-22.91	≤8.00	PASS

Test Graphs

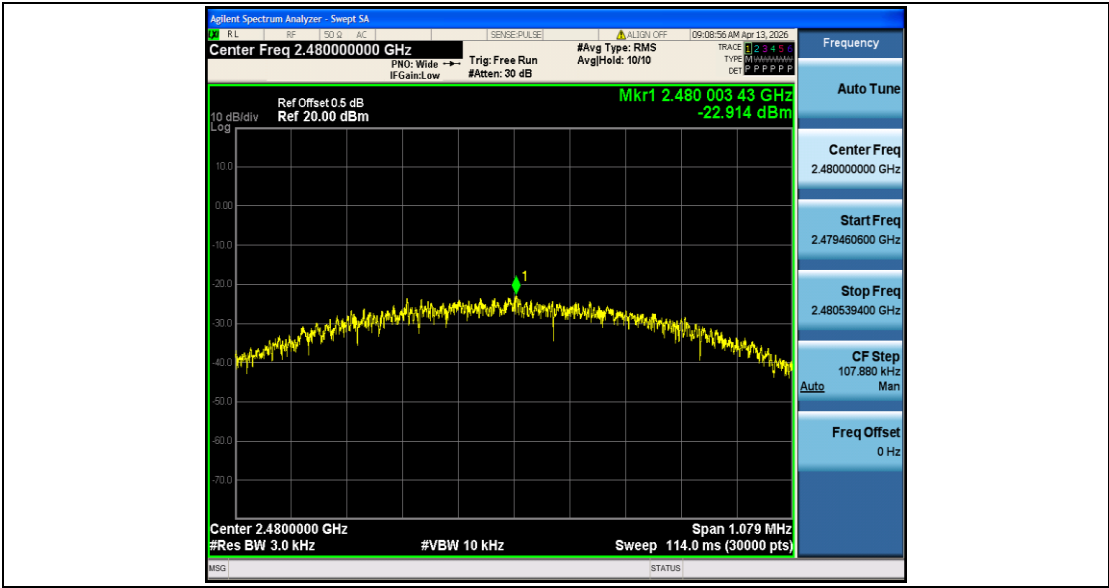
BLE_1M_Ant1_2402



BLE_1M_Ant1_2440



BLE_1M_Ant1_2480



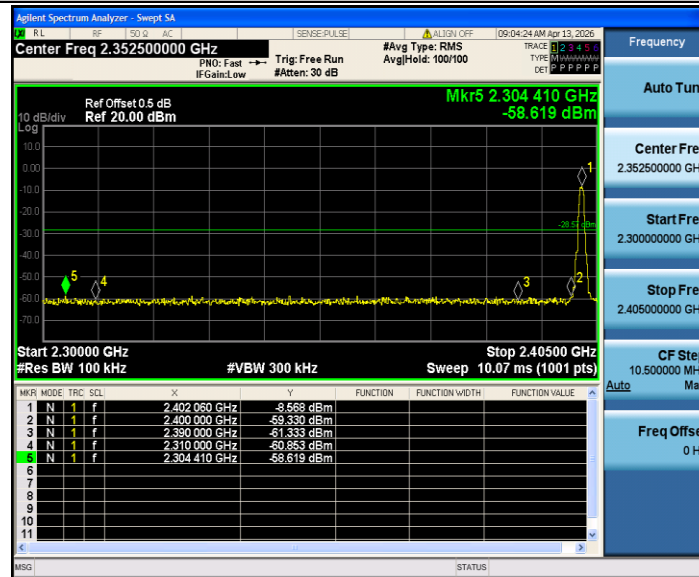
Appendix E: Band edge measurements

Test Result

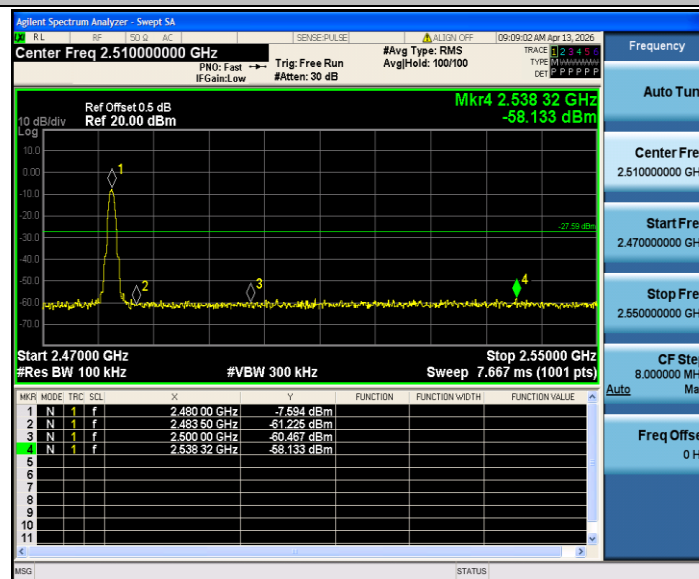
TestMode	Antenna	Channel	Freq(MHz)	RefLevel[dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	Low	2402	-8.57	-58.62	≤-28.57	PASS
		High	2480	-7.59	-58.13	≤-27.59	PASS

Test Graphs

BLE_1M_Ant1_Low_2402



BLE_1M_Ant1_High_2480



Appendix F: Conducted Spurious Emission

Test Result

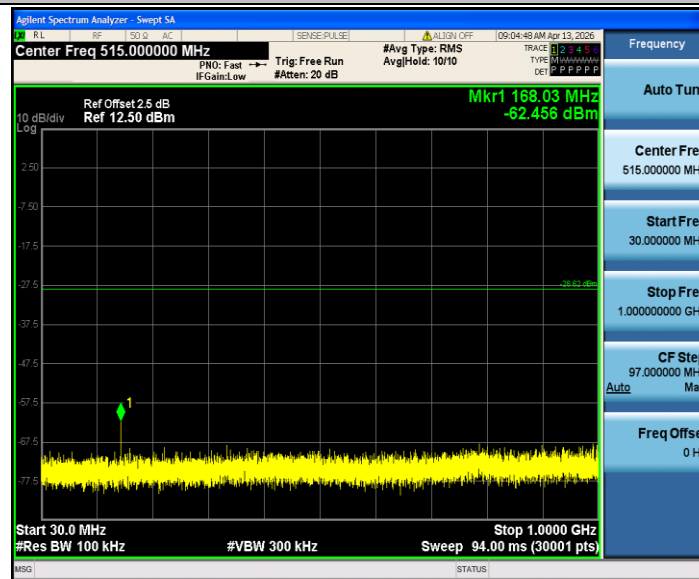
TestMode	Antenna	Freq(MHz)	FreqRange [MHz]	RefLevel [dBm]	Result[dBm]	Limit[dBm]	Verdict
BLE_1M	Ant1	2402	Reference	-8.62	-8.62	---	PASS
			30~1000	-8.62	-62.46	≤-28.62	PASS
			1000~26500	-8.62	-51.73	≤-28.62	PASS
		2440	Reference	-8.73	-8.73	---	PASS
			30~1000	-8.73	-61.84	≤-28.73	PASS
			1000~26500	-8.73	-51.7	≤-28.73	PASS
		2480	Reference	-9.07	-9.07	---	PASS
			30~1000	-9.07	-61.94	≤-29.07	PASS
			1000~26500	-9.07	-50.53	≤-29.07	PASS

Test Graphs

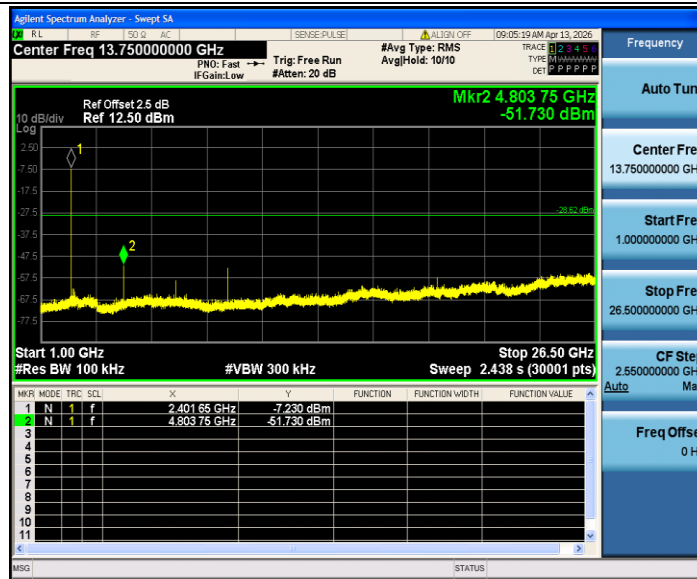
BLE_1M_Ant1_2402_0~Reference



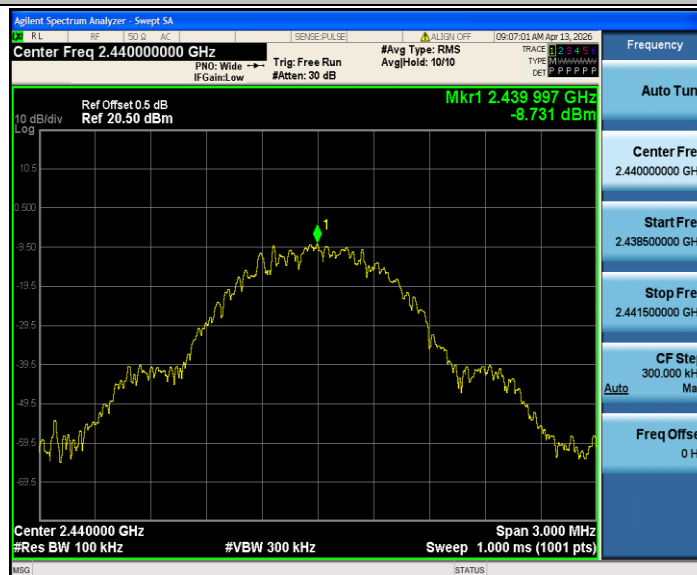
BLE_1M_Ant1_2402_30~1000



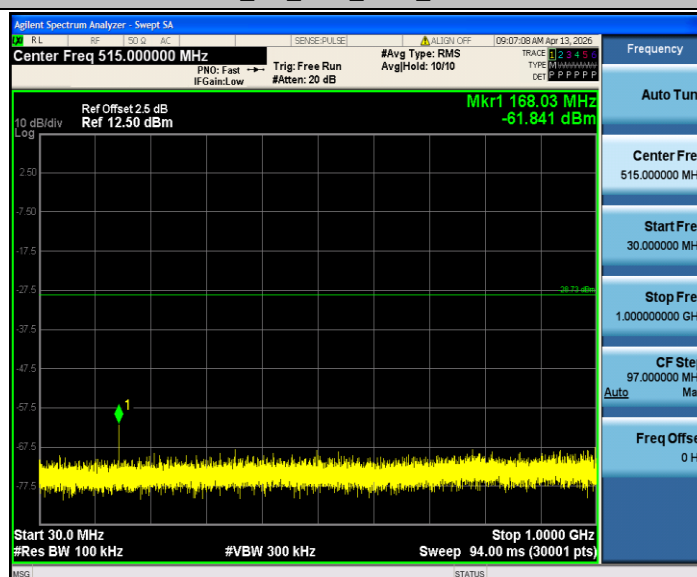
BLE_1M_Ant1_2402_1000~26500



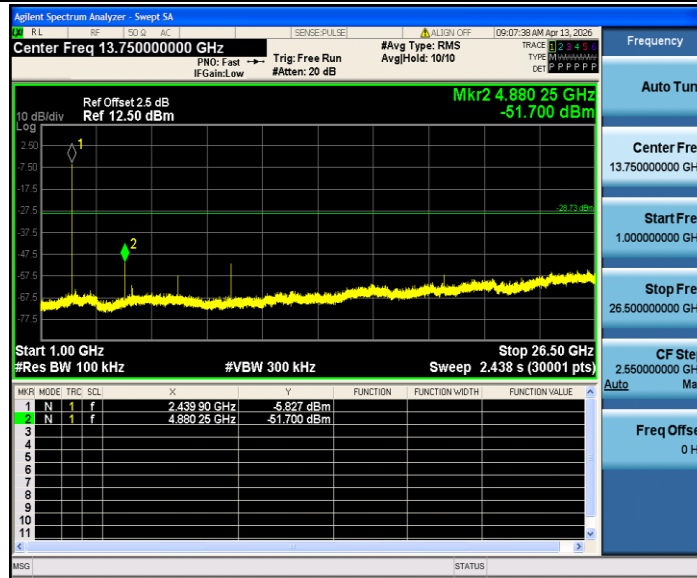
BLE_1M_Ant1_2440_0~Reference



BLE_1M_Ant1_2440_30~1000



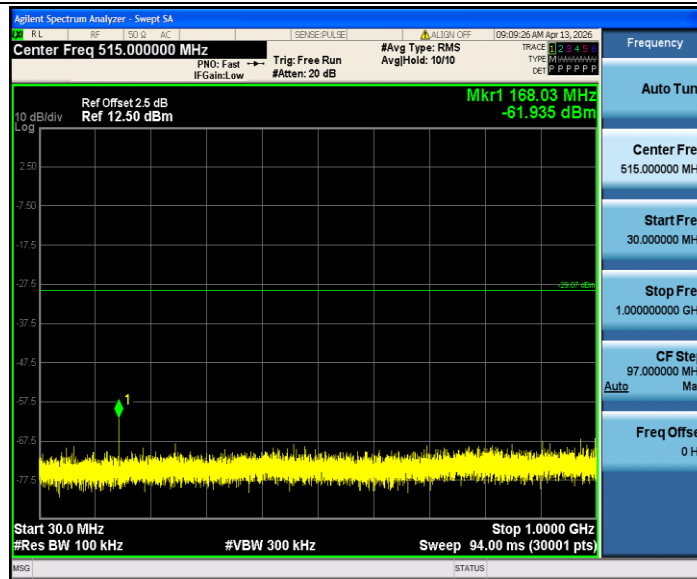
BLE_1M_Ant1_2440_1000~26500



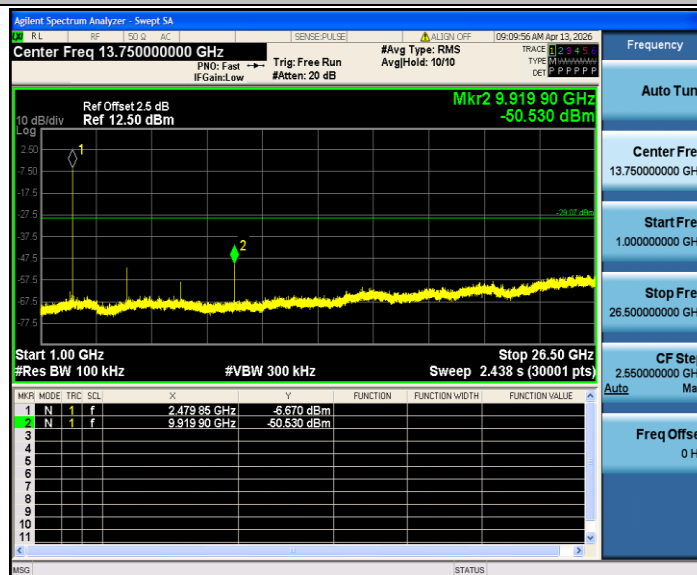
BLE_1M_Ant1_2480_0~Reference



BLE_1M_Ant1_2480_30~1000



BLE_1M_Ant1_2480_1000~26500

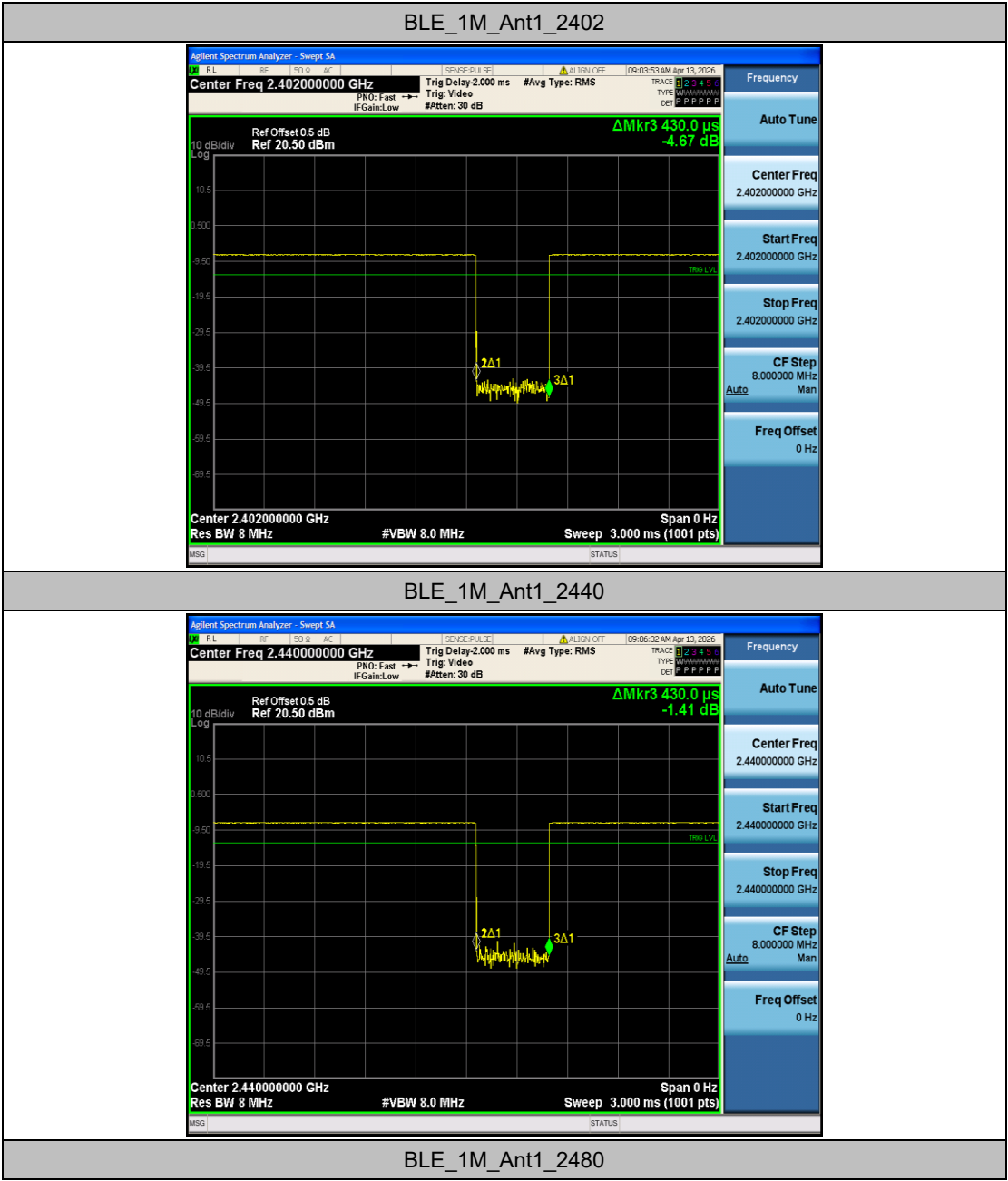


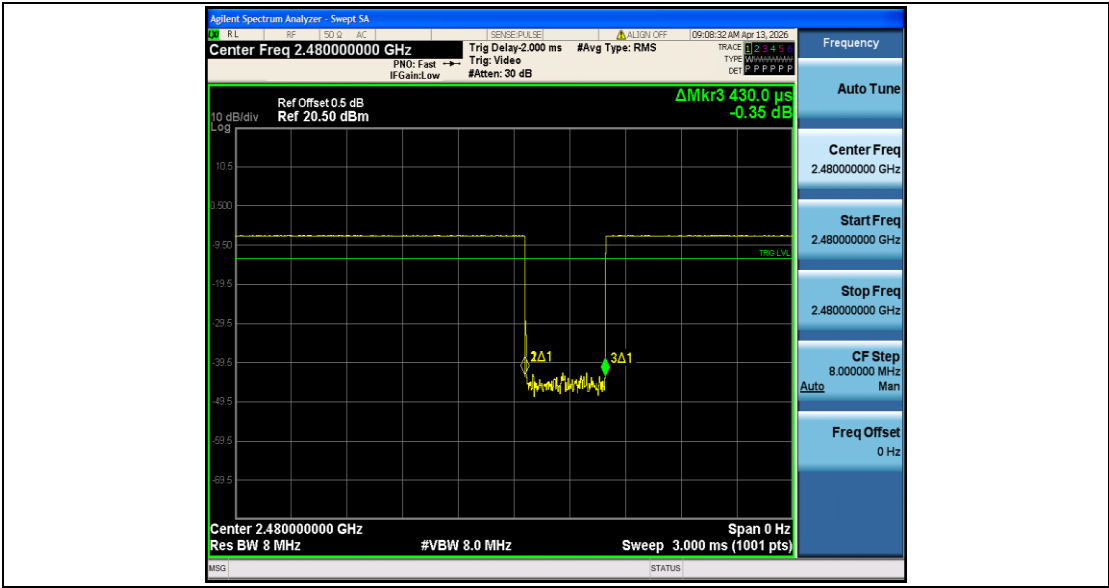
Appendix G: Duty Cycle

Test Result

TestMode	Antenna	Freq(MHz)	ON Time [ms]	Period [ms]	X	DC [%]	xFactor	Limit	Verdict
BLE_1M	Ant1	2402	0.00	0.43	---	100	0	---	---
		2440	0.00	0.43	---	100	0	---	---
		2480	0.00	0.43	---	100	0	---	---

Test Graphs





Appendix H: Emissions in Restricted Bands

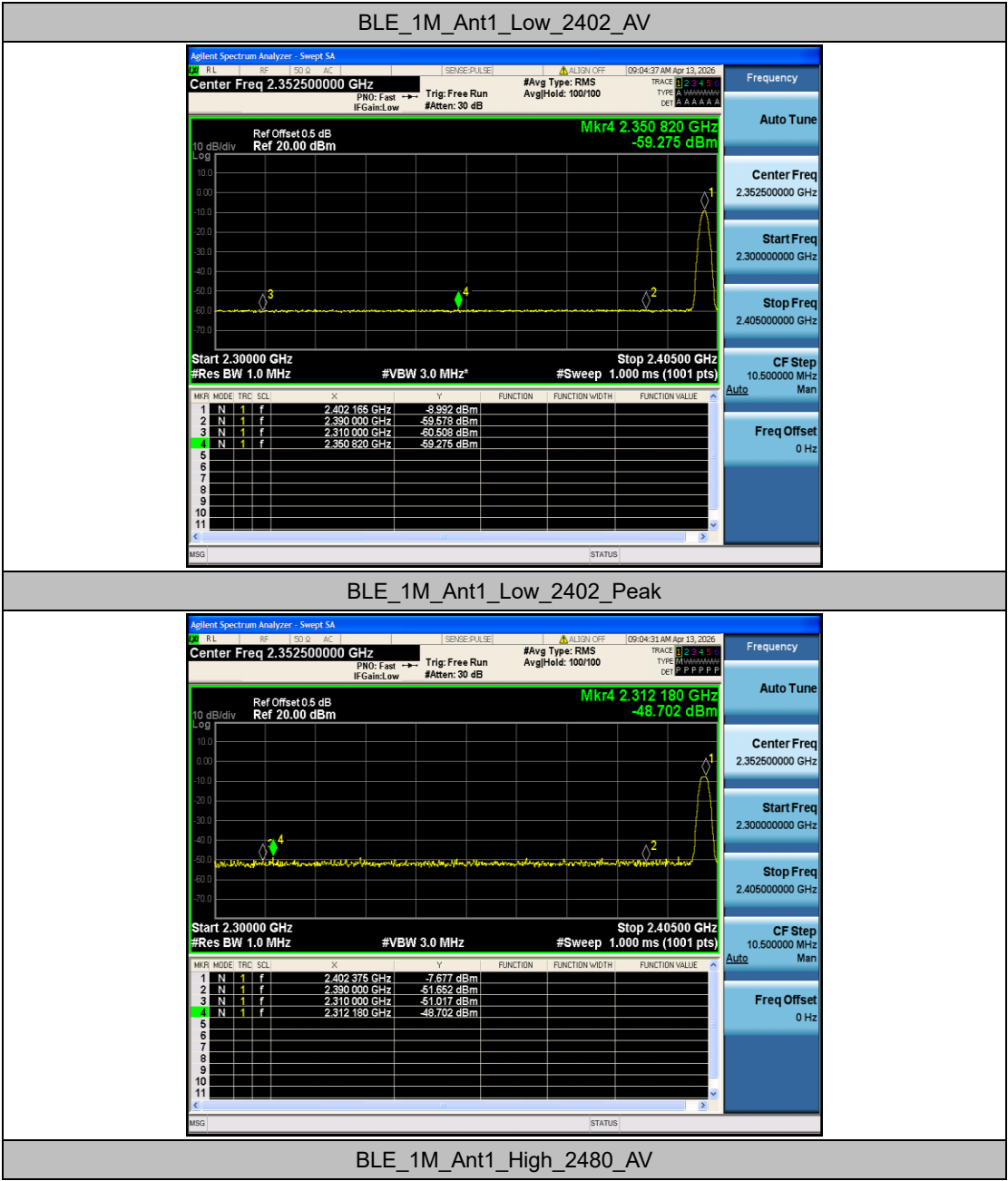
Test Result

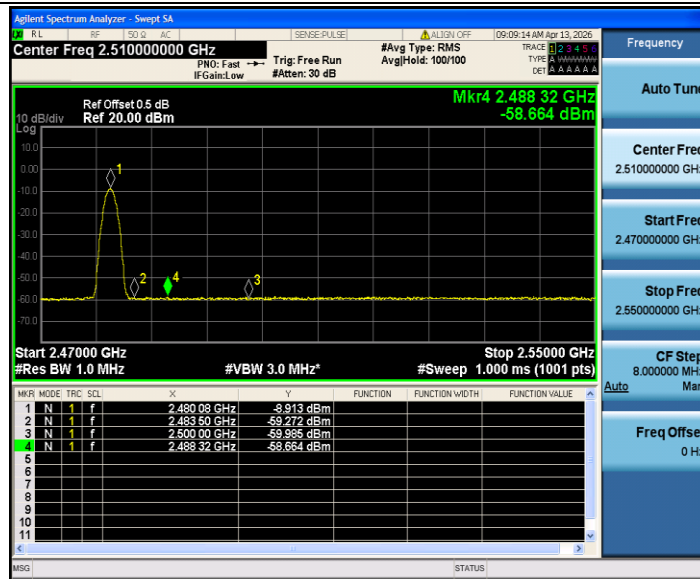
TestMode	Antenna	Channel	Freq(MHz)	Detector	Freq [MHz]	Result [dBm]	Gain [dB]	DC Factor [dB]	Result [dBuV/m]	Limit [dBuV/m]	Verdict
BLE_1M	Ant1	Low	2402	AV	2310.000	-60.51	2.00	0.00	36.69	≤54	PASS
				AV	2350.820	-59.27	2.00	0.00	37.93	≤54	PASS
				AV	2390.000	-59.58	2.00	0.00	37.62	≤54	PASS
				Peak	2310.000	-51.02	2.00	0.00	46.18	≤74	PASS
				Peak	2312.180	-48.7	2.00	0.00	48.50	≤74	PASS
				Peak	2390.000	-51.65	2.00	0.00	45.55	≤74	PASS
		High	2480	AV	2483.500	-59.27	2.00	0.00	37.93	≤54	PASS
				AV	2488.320	-58.66	2.00	0.00	38.54	≤54	PASS
				AV	2500.000	-59.99	2.00	0.00	37.21	≤54	PASS
				Peak	2483.500	-50.77	2.00	0.00	46.43	≤74	PASS
				Peak	2485.760	-48.72	2.00	0.00	48.48	≤74	PASS
				Peak	2500.000	-51.91	2.00	0.00	45.29	≤74	PASS

Note:

- The limit in dBm for average detector is conversion from 54dBuV/m, according to 15.209(a). The limit in dBm for peak detector is 20dB above the limit of average detector in dBm.

Test Graphs





BLE_1M_Ant1_High_2480_Peak

